

**REMARKS**

Applicants submit this Amendment in response to the Office Action mailed May 4, 2006. Claims 69 and 70 are amended herein merely for clarity and not for the purposes of patentability. No new matter has been added. Applicants believe that no fees are necessary for the proper entry and consideration of this Amendment. However, if the Office deems otherwise, Applicants hereby authorize the Director to charge the cost thereof to Deposit Account No. 13-2855.

In light of the following remarks, Applicants believe that the present application is in condition for allowance and respectfully request the Examiner to acknowledge the same.

**ALLOWABLE SUBJECT MATTER**

Applicants thank the Examiner for indicating claims 68-70 as allowable.

Claims 6-11, 16, 20, 21, 23, 24, 27, 28, 30-34, 38-43, 47, 51, 52, 54, 57, 59-62, 64 and 67 stand objected to as being dependent on a rejected base claim, but Applicants thank the Examiner for indicating that they would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

As will be discussed in greater detail below, Applicants submit that independent claims 1 and 35 are in condition for allowance and therefore, each of the above-identified claims that currently stand objected to should also be in condition for allowance. Therefore, Applicants respectfully request reconsideration and withdrawal of these objections.

**REJECTIONS UNDER 35 U.S.C. §102****Rejections Based on Page et al.**

Claims 1, 2, 5, 12-15, 17-19, 22, 25, 26 and 29 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Page et al. (U.S. Patent No. 4,161,390). Applicants respectfully traverse this rejection.

Specifically, Applicants submit that claim 1, and therefore each of the claims dependent thereon, recites, *inter alia*, “a housing having...a plurality of side walls...and at least one serpentine burner conduit extending through the housing...” Page et al. fail to disclose such features.

Specifically, Page et al. disclose a conventional calcining apparatus including a cylindrical kettle. Applicants respectfully assert that a cylinder does not constitute a plurality of side walls, but rather inherently constitutes a single curved side wall. Each of the figures of Page et al. disclose such a sidewall. Additionally, Page et al. specifically state that “the kettle 16 of generally cylindrical form ha[s] a bottom wall 13 and side wall 15...” Col. 2, lines 56-57. Thus, Applicants assert that Page et al. do not even suggest a calcining apparatus having a plurality of side walls.

Additionally, Applicants respectfully assert that Page et al. fail to disclose “a serpentine burner conduit,” as recited in claim 1. Rather, as the Office Action points out, Page et al. merely disclose “a serpentine path.” Office Action, Page 2. While the Office Action directs our attention to alleged “conduits 192-203” for this rejection, reference numerals 192-203 do not identify conduits, but merely, flow paths.

The flow paths 192-203 are defined by a plurality of flues 34-39, 40-45 and chambers 30-33. The flues are “horizontally positioned within the kettle with their ends affixed at opposite sides of the kettle wall” such that they communicate with the chambers. Col. 3, lines 6-8. Thus, the flow paths 192-203 are not defined by “a serpentine burner conduit,” at all, but rather a combination of a plurality of flues and chambers.

Therefore, because Page et al. fail to disclose “a plurality of side walls” and “a serpentine burner conduit,” as is recited in claim 1, Applicants respectfully assert that Page et al. fails to anticipate claim 1 and claim 1 is in condition for allowance. Additionally, Applicants respectfully submit that claims 2, 5, 12-15, 17-19, 22, 25, 26 and 29 are also in condition for allowance as being dependent on an allowable base claim.

Applicants respectfully request reconsideration and withdrawal of this rejection.

Rejections Based on Bounini

Claims 35-37, 39, 44-46, 48-50, 53, 55, 56, 58, 63, 65 and 66 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Bounini (U.S. Patent No. 4,626,199). Applicants respectfully traverse this rejection.

Specifically, Applicants submit that claim 35, and therefore each of the claims dependent thereon, recites, *inter alia*, “a housing having an open top, a bottom wall, and a plurality of side walls extending therebetween...” Bounini fails to disclose such features.

Specifically, Bounini merely discloses a conventional calcining apparatus including a cylindrical or conical kettle. Applicants respectfully assert that a cylinder or cone does not constitute a plurality of side walls, but rather inherently constitute a single curved side wall. Each of the figures of Bounini disclose such a sidewall. Applicants assert that Bounini does not even suggest a calcining apparatus having a plurality of side walls. While one may foreseeably argue that FIG. 2 of Bounini illustrates a kettle 40 having a plurality of side walls, one being conical and the other being cylindrical, neither of these side walls extend between an open top and a bottom wall, as recited in claim 35.

Accordingly, Bounini fails to teach, suggest or discloses each and every element of claim 35, and therefore claim 35 should be in condition for allowance. Furthermore, claims 36, 37, 39, 44-46, 48-50, 53, 55, 56, 58, 63, 65 and 66 should also be in condition for allowance as being dependent on an allowable base claim.

Applicants respectfully request reconsideration and withdrawal of this rejection.

REJECTIONS UNDER 35 U.S.C. §103

Claims 3 and 4 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Page et al. in view of Kirkpatrick et al. (U.S. Patent No. 5,333,597). Applicants submit that claims 3 and 4 are dependent on allowable claim 1. Therefore, in light of the foregoing remarks establishing the allowability of claim 1, claims 3 and 4 should also be in condition for allowance.

Applicants respectfully request reconsideration and withdrawal of this rejection.

Moreover, Applicants submit that a prima facie case of obviousness cannot be based, not even in part, on Kirkpatrick et al. in the present case. Specifically, although the Office Action alleges that Kirkpatrick et al. disclose a burner conduit branching off into multiple smaller conduits, Applicants respectfully assert that the combination of Kirkpatrick et al. with any other reference is improper because Kirkpatrick et al. discloses subject matter that is non-analogous to the subject matter of the present application.

The present application is directed to a gypsum calcining apparatus. To the contrary, Kirkpatrick et al. disclose an “abatement member and method for inhibiting formation of oxides of nitrogen.” See Title of Kirkpatrick et al. Kirkpatrick et al. disclose that such a device is used to “inhibit[] the formation of oxides of nitrogen (NO<sub>x</sub>) in gas-fired forced air

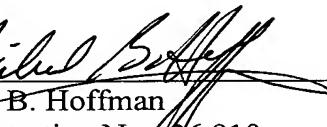
furnaces." See Field of the Invention section of Kirkpatrick et al. Applicants respectfully assert that a person having ordinary skill in the art of gypsum calcining would not look to a device for inhibiting the formation of nitrous oxides for technological development. Such a device occupies a field of endeavor different from that occupied by the present application. Furthermore, the subject matter disclosed by Kirkpatrick et al. fails to even be relevant to the calcining apparatus of the present application. Rather, as stated above, Kirkpatrick et al. focus on the construction of a porous abatement for inhibiting nitrogen oxide formation. This has absolutely no correlation to the present application.

### CONCLUSION

Applicants believe that each of the objections, rejections and concerns identified in the outstanding office action have been either accommodated, traversed or rendered moot, and therefore, the present application is in condition for allowance. If any issue remains outstanding that the Examiner believes may be remedied via telephone conference, Applicants invite the Examiner to telephone the undersigned at (312) 474-6300.

Respectfully submitted,

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